



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,094	02/21/2002	John Castle Simmons		8620
7590	11/24/2004		EXAMINER	
JOHN C. SIMMONS 7993 CAVERSHAMWOOD LN. GERMANTOWN, TN 38138			JOHNSON, STEPHEN	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/080,094	SIMMONS, JOHN CASTLE
	Examiner Stephen M. Johnson	Art Unit 3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 November 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 10-15 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 14 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 11-13 and 15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 10-15 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

Art Unit: 3641

1. Applicant's election without traverse of species E (fig. 4E and associated written description) in the reply filed on 11/17/2004 is acknowledged.

Claims 10 and 14 are withdrawn from consideration as being directed to non-elected species. Claim 10 recites "transmit it through a lever or set of levers to the rear of the projectile". Claim 14 recites "a sealed area in advance of the projectile's path"; "a first sealed plunger", and "a second sealed plunger".

Claims 11-13 and 15 read on the elected species and an action on these claims follows.

2. The drawings are objected to because the application lacks reference numerals to identify where each of the items recited in the specification can be located in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3641

3. Claims 11-13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, line 9, what structure (in the elected embodiment (fig. 4E)) is intended to correspond to the claimed “a leveraging means placed in or being part of the projectile’s movable carrier”? Standard leveraging means usually involve a lever and associated fulcrum. Please clarify. Use of the phrase “leveraging device” in claim 15 is indefinite for like reasons.

In claim 12, line 3, which chamber (in the elected embodiment) is intended to correspond to the claimed “a nearby chamber”? In claim 13, line 1, the phrase “the fluid, gel, gas, or other medium” lacks an antecedent. In claim 13, line 1, the phrase “the compression chamber” lacks an antecedent. In claim 13, line 1, it is not understood as to what mediums are intended by the phrase “other medium”. In claim 15, the phrase “the faster moving portion” lacks an antecedent. In claim 15, what portion or structure is intended to correspond to the claimed “the faster moving portion”?

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 3641

In claim 13, applicant claims “any other form of ignition” when the application as originally filed only recites specific forms of ignition. In claim 13, applicant claims “an combination thereof” in reference to an ignition resulting from impact and “any other form of ignition”. In the application as originally filed, applicant has not disclosed how this combination of ignition systems would function in such a way as to place it within the ability of one of ordinary skill in this art.

6. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 13, applicant claims “an other form of ignition” when the application as originally filed only recites specific forms of ignition. In claim 13, applicant claims “an combination thereof” in reference to an ignition resulting from impact and “any other form of ignition”. In the application as originally filed, applicant has not disclosed how this combination of ignition systems would function in such a way as to place it within the ability of one of ordinary skill in this art.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Russell.

Russell discloses a device for accelerating a projectile comprising:

Art Unit: 3641

a) a projectile;	15
b) a projectile carrier;	14
c) an acceleration means;	18 (same means)
d) an effectively anchored apparatus to reduce the speed of the projectile carrier;	11, col. 3, lines 3-14
e) leveraging means;	16, 34 (equivalent means)
f) a moveable diaphragm or piston; and	14, 23, 32
g) fluid explosive in the compression chamber.	16, col. 3, lines 40-44

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashley in view of either Malter or Jakobsson.

Ashley discloses a device for accelerating a projectile comprising:

a) a projectile;	10
b) a projectile carrier;	16, 12
c) an acceleration means;	col. 3, lines 44-46 (same means)
d)means to remove the carrier from the projectile;	col. 5, lines 4-6
e) leveraging means;	42, 14, col. 3, lines 54-68;

	and col. 4, lines 1-68 (same means)
f) a moveable diaphragm or piston; and	14
g) fluid explosive in the compression chamber.	col. 3, lines 32-35

Ashley applies as recited above. However, undisclosed is a means to remove the carrier from the projectile that is an anchored apparatus to reduce the speed of the projectile carrier. Malter (see figs. 3, 4) and Jakobsson (see fig. 8) each teach a means to remove the carrier from the projectile that is an anchored apparatus to reduce the speed of the projectile carrier. Applicant is substituting one means to remove the carrier from the projectile for another in an analogous art setting. Both means to remove the carrier are commonly known in this art. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Malter or Jakobsson to the Ashley device for accelerating a projectile and have a device for accelerating a projectile with a different associated means for removing the carrier from the projectile.

11. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Abels.

Abels discloses a device for accelerating a projectile comprising:

a) a projectile;	15, 21
b) a projectile carrier;	10
c) an acceleration means;	rearward of 10 (4)
d) an effectively anchored apparatus to reduce the speed of the projectile carrier;	11, 5
e) leveraging means;	13', 19, 18

Art Unit: 3641

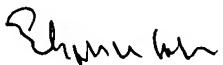
f) a moveable diaphragm or piston; and 18

g) an explosive in the compression chamber. 13', 19

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Charpentier, Wallow et al., Cuadros, Societe Brevets, Rooney (225), Rooney (879), Desevaux et al., and Costello et al. disclose other state of the art projectiles with associated carriers.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 703-306-4158. The examiner can normally be reached on Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326. The fax phone number for after final communications is (703) 872-9327.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
Art Unit 3641

SMJ